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dcpatent@hhlaw.com

rogruwel@hhlaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* NELSON GONZALEZ  
and HUMBERTO ORGANVIDEZ

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Appeal 2008-5888  
Application 10/689,716  
Technology Center 2600

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Decided: January 5, 2009

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Before KENNETH W. HAIRSTON, ROBERT E. NAPPI  
and JOHN A. JEFFERY, *Administrative Patent Judges*.  
HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from a non-final rejection of claims 1 to 7, 29, 30, 32 to 34, 41, 44 to 48, and 50 to 52. We have jurisdiction under 35 U.S.C. § 6(b).

We will sustain the obviousness rejection.

Appellants have invented a motherboard for supporting multiple video cards via a chipset, a scalable interconnect, and a plurality of high-speed video card slots connected to the interconnect (Fig. 6; Spec. 14 to 16, 25 to 28, and 36).

Claim 1 is representative of the claimed invention, and it reads as follows:

1. A motherboard, comprising:  
a chipset for managing data transfers within the motherboard;  
a scalable interconnect connecting to the motherboard; and  
a plurality of high-speed video card slots connected to the interconnect, the high speed video card slots including at least one first video card slot and second video card slot,

wherein the motherboard enables a first and a second video card to attach, respectively, to that at least one first video card slot and second video card slot, and wherein the motherboard enables the first and the second video cards to operate in parallel to output graphics data to a single visual display device.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Grimaud	US 5,546,530	Aug. 13, 1996
Stufflebeam	US 6,295,566 B1	Sep. 25, 2001
Levy	US 2004/0088469 A1	May 6, 2004 (filed Oct. 30, 2002)

The Examiner rejected claims 1 to 7, 29, 30, 32 to 34, 41, 44 to 48, and 50 to 52 under 35 U.S.C. § 103(a) based upon the teachings of Levy, Stufflebeam, and Grimaud.

## ISSUE

Appellants argue *inter alia* that the Examiner has not set forth a *prima facie* case of obviousness because the applied references neither teach nor would have suggested to one of ordinary skill in the art at least two high-speed video slots where at least two video cards are attached for parallel operation on a motherboard (Br. 11 and 12). Appellants also argue that the Examiner ignored the evidence of secondary considerations presented in the Declaration submitted under 37 C.F.R. § 1.132 (Br. 12). Thus, the issue before us is have the Appellants made a showing via arguments and/or evidence that is sufficient to overcome the Examiner's showing of obviousness?

## FINDINGS OF FACT

1. According to Appellants (Spec. 5), the graphics performance of a computer may be improved through the use of multiple video cards that process graphics data in parallel.

2. At the oral hearing, Appellants' counsel acknowledged that the computing device in the reference to Levy is located on a motherboard.

3. Levy describes a computing device 100 comprised of one or more devices (e.g., video cards or Peripheral Component Interconnect (PCI) bridges) coupled to a root device of a chipset 104 (Fig. 1; para. 0016). Levy states that the root device attached to chipset 104 can be a scalable PCI interface 110 (para. 0016). Levy additionally teaches that PCI Express supports high performance links between chips (para. 0001).

4. Stufflebeam describes a PCI bus system 106 located on a motherboard that supports insertion of video cards 150 in a vacant slot for parallel processing (Fig. 1; col. 1, ll. 11 to 36; col. 3, ll. 31 to 60, col. 4, ll. 13 to 50; col. 5, ll. 7 to 22).

5. Grimaud describes the simultaneous operation of video (i.e., graphics) processors that are inserted into card slots to increase processing speed (col. 2, ll. 40 to 65; col. 6, ll. 3 to 7; col. 7, ll. 36 to 39).

### PRINCIPLES OF LAW

The Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If that burden is met, then the burden shifts to the Appellants to overcome the *prima facie* case with argument and/or evidence. *See Id.*

An improvement in the art is obvious if “it is likely the product not of innovation but of ordinary skill and common sense.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

A nexus is required between the merits of the claimed invention and the objective evidence offered to rebut the *prima facie* case of obviousness made by the Examiner. *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1027 (Fed. Cir. 1985).

Secondary considerations are worthy of substantial weight only when there is a nexus established between the merits of the claimed invention and the evidence proffered by the secondary considerations. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988).

The burden is on Appellants to establish the nexus. *Ex parte Remark*, 15 USPQ2d 1498, 1504 (BPAI 1990).

### ANALYSIS

Appellants recognize that the graphics performance of a computer may be improved through the use of multiple video cards that process graphics data in parallel (Finding of Fact 1). Levy, like Appellants, describes a computing device 100 located on a motherboard<sup>1</sup> that is comprised of one or more video cards coupled to a chipset 104 via a scalable Peripheral Component Interconnect (PCI) 110 (Finding of Fact 3). Although Levy does not expressly state that the video cards coupled to the PCI interface operate in parallel, we agree with the Examiner (Ans. 4) that it would have been obvious to one of ordinary skill in the art to operate the video cards in Levy in parallel for “faster processing” based upon the teachings in Stufflebeam that it is well known for computing devices located on a motherboard to operate an attached plurality of video cards in parallel (Finding of Fact 4). We additionally agree with the Examiner that it would have been obvious to the skilled artisan to operate the video cards in the computing system of Levy in parallel as taught by Grimaud because the parallel operation of the video cards would produce output graphics data “faster than any one of them taken separately would be able to render” (Ans. 5) (Finding of Fact 5). In summary, the Appellants’ disclosed and claimed improved graphics processing speed through parallel operation of the video

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<sup>1</sup> Appellants’ counsel acknowledged at oral hearing that the computing device in Levy is located on a motherboard (Finding of Fact 2).

cards would have been obvious because “it is likely the product not of innovation but of ordinary skill and common sense. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. at 1742.

Based upon the teachings of the applied references, we find that the Examiner has met the initial burden of presenting a *prima facie* case of obviousness. Thus, the burden properly shifted to Appellants to overcome the *prima facie* with argument and/or evidence. *In re Oetiker*, 977 F.2d at 1445.

Appellants’ evidence of secondary considerations consists of a Declaration by Frank Azor, Senior Vice President and General Manager of the Worldwide Product Group for Alienware Corporation. The declarant discusses “U.S. Patent Application No. 6,557,065 to Peleg” (para. 2), but this reference was not relied on by the Examiner to reject the claims on appeal.

The declarant states (para. 5) that the X2 motherboard currently offered by Alienware has achieved significant commercial success, but he did not provide any supporting evidence that ties the commercial success of the noted motherboard to the claimed invention.

The declarant states (para. 7) that the “Iwill Corporation, a multinational producer of computer motherboards, has entered into a license agreement with Alienware, the assignee of the invention, to sell motherboards that incorporate the Applicants’ invention,” but failed to provide evidence that the license is tied to the claimed invention.

The declarant provides a list of motherboard manufacturers that purportedly copied/use the claimed invention (para. 8), but the record is

completely devoid of the specifics of the motherboard technology used by each manufacturer, and the relevance of each motherboard to the claimed invention.

The laudatory articles attached to the Declaration are some evidence that Appellants have been active in the general area of the claimed invention, and have achieved recognition for improving the performance of graphics cards, but the articles do not attribute Appellants' success to the claimed invention. Several of the articles recognize that parallel processing with two video cards is faster than processing with a single video card.

Appellants' mere allegations of commercial success, advancement of the invention over the previous state of the art, and copying by others (Br. 12) are not buttressed by evidence in the record.

In summary, Appellants have not established a sufficient nexus between the merits of the claimed invention and the objective evidence that would serve to rebut the *prima facie* case of obviousness made by the Examiner. *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d at 1027; *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d at 1392; *Ex parte Remark*, 15 USPQ2d at 1504.

Turning to Appellants' argument (Br. 13) concerning dependent claims 50 to 52, we find that the references of record teach or would have suggested to the skilled artisan "multiple high-speed video card slots" for receiving video cards.



CONCLUSION OF LAW

The Appellants' arguments and/or evidence are not sufficient to rebut the *prima facie* case of obviousness established by the Examiner for the claims on appeal.

ORDER

The obviousness rejection of claims 1 to 7, 29, 30, 32 to 34, 41, 44 to 48, and 50 to 52 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

KIS

HOGAN & HARTSON, L.L.P.  
IP GROUP, COLUMBIA SQUARE  
555 THIRTEENTH STREET, N.W.  
WASHINGTON, DC 20004